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FEDERAL HORTICULTURAL BOARD

WASHINGTON, D. C.

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LETTER OF INFORMATION No. 24

MAY 15, 1917.

DEAR SIR: Five important avocado insects from Guatemala are listed in this Letter of Information, viz, an undescribed weevil (*Conotrachelus* sp.) and four coccids, *Aspidiotus sub-similis*, *Chrysomphalus scutiformis*, *Lepidosaphes mimosarum*, and an unrecognized soft scale of the subfamily Coccinæ. The weevil was taken in seed, and, judging from the numerous deep tunnels made by the larvæ, it is no doubt fully as destructive to the seed as is the avocado weevil. The soft scale noted above is an unusually large one which secretes honeydew copiously, and would doubtless be a very injurious insect if established on avocado trees in this country.

The mango weevil (*Sternochetus mangiferæ*) in mango seeds from India, and the mango scale (*Coccus mangiferæ*) on plants from Cuba, represent two very important mango pests intercepted since the last Letter of Information was issued.

The bay psylla (*Trioza alacris*) was collected on a shipment of bay trees from Belgium. This insect appears to be established in but two localities in the United States; viz, California and Florida.

Numerous coccids have been taken, the more important of which are *Parlatoria chinensis* on *Pyrus sinensis* from China; *Targionia sacchari* on *Saccharum* from Cuba, *Lecanium bituberculatum* on *Malus* from Holland, and *Orthezia cataphracta* on *Iris setosa* from Newfoundland.

A single egg mass of the gipsy moth was collected in a shipment of nursery stock from Belgium.

*Leptobyrsa explanata*, referred to in previous Letters of Information, has been reduced to a synonym of *Leptobyrsa rhododendri*.

Yours, very truly,

C. L. MARLATT,  
Chairman of Board.

## LIST, BY COUNTRIES, OF PESTS COLLECTED

[The number in parenthesis following name of host indicates the number of times reported.]

Country of origin and name of pest.	Host.
<b>ANGOLA, AFRICA.</b>	
Insect: Calandra oryza (rice weevil).....	Albizzia fastigiata, seeds of (1).
<b>ARGENTINA.</b>	
Insect: Sitotroga cerealella (Angoumois grain moth).....	Maiz cuarenton (1).
Disease: Phoma sp.....	Schinopsis lorentzi (1).
<b>AUSTRALIA.</b>	
Insects: Hemichionaspis aspidistrae (aspidistra scale).....	Asplenium diversifolium (1), Davallia fijiensis ornata (1).
Pseudococcus bromeliae (pineapple mealy bug).....	Pineapple (2).
Diseases: Heterodera radicola (nematode).....	Rosa (1).
Macrosporium sp.....	Atriplex semibaccata (1).
Melanconium sacchari.....	Saccharum officinarum (sugar-cane cut- tings) (1).
Phoma sp.....	Atriplex nummularia (1).
<b>AZORES ISLANDS.</b>	
Insect: Aspidiotus camelliae (greedy scale).....	Persea azorica (1).
<b>BAHAMA ISLANDS.</b>	
Insects: Chrysomphalus dictyospermi (scale insect).....	Coconut palm (1).
Chrysomphalus ficus (Florida red scale).....	Do.
<b>BELGIUM.</b>	
Insects: Aleyrodes sp. (white fly).....	Azalea (21), bay (1), rhododendron (1).
Aspidiotus britannicus (scale insect).....	Bay (16).
Aspidiotus hederæ (ivy scale).....	Bay (1), palm (22).
Chionaspis salicis (willow scale).....	Lilac (1).
Chrysomphalus dictyospermi (scale insect).....	Palm (2).
Chrysomphalus ficus (Florida red scale).....	Aspidistra (2), palm (4).
Coccus hesperidum (soft brown scale).....	Bay (19).
Gracilaria zachrysa (leaf miner).....	Azalea (68).
Hemichionaspis aspidistrae (aspidistra scale).....	Aspidistra (11).
Noctuid larva.....	Azalea (1).
Parlatoria proteus (scale insect).....	Palm (1).
Peronea schalleriana (Tortricidæ).....	Azalea (6).
Pierid pupa.....	Azalea (1).
Porthetria dispar (gipsy moth) (one egg cluster).....	? (1).
Pseudococcus pseudonipæ (mealy bug).....	Palm (1).
Pseudococcus sp. (mealy bug).....	Bay (1).
Saissetia hemisphaerica (hemispherical scale).....	Palm (1).
Thrips.....	Azalea (6).
Tortricid egg mass.....	Azalea (1).
Tortricid pupa.....	Bay (1).
Trioza alacris (baypsylla).....	Do.
Diseases: Bacterium tumefaciens (crown gall).....	Azalea (1).
Exobasidium sp.....	Azalea (193), evergreen shrubs (2), hor- tensia (1).
Glomerella cingulata.....	Palm (2).
Pestalozzia guepini.....	Azalea (4), rhododendron (1).
Phyllosticta sp.....	Azalea (1).
Sphaeropsis salicicola.....	Salix (1).
<b>BERMUDA.</b>	
Insect: Howardia biclavus (mining scale).....	Carob cuttings (1).

## List, by countries, of pests collected—Continued.

Country of origin and name of pest.	Host.
<b>BRAZIL.</b>	
<b>Insects:</b>	
Cerataphis latanise (palm aphid).....	Orchid (1).
Diaspis boisduvalii (scale insect).....	Orchid (2).
Homocogamia brasiliiana (roach).....	Orchid (1).
Liopus sp. (Cerambycidae).....	Brazil nut (1).
Megalomyrmex n. sp. (ant).....	Orchid (1).
Parlatoria proteus (scale insect).....	Palm leaves (1).
Periplaneta sp. (roach).....	Orchid (2).
Prenolepis longicornis (ant).....	Orchid (1).
Pseudococcus adonidum (long-tailed mealy bug).....	Do.
Pseudococcus sp. (mealy bug).....	Chayota edulis (1), orchid (1).
Pseudoparlatoria parlatorioides (scale insect).....	Orchid (1).
Saissetia oleae (black scale).....	Chayota edulis (1).
<b>Disease:</b>	
Diplodia sp.....	Do.
<b>BRITISH GUIANA.</b>	
<b>Insects:</b>	
Cerataphis latanise (palm aphid).....	Palm (1).
Chrysomphalus dictyospermi (scale insect).....	Do.
<b>BRITISH WEST INDIES.</b>	
<b>Disease:</b>	
Diplodia sp.....	Chayota edulis (1).
<b>CANADA.</b>	
<b>Diseases:</b>	
Coniothyrium sp.....	Pyrus communis (3).
Oospora scabies (common scab).....	Irish potato (1).
Phytophthora infestans.....	Do.
<b>CANAL ZONE.</b>	
<b>Insects:</b>	
Asterolecanium aureum (scale insect).....	Orchid (1).
Chrysomphalus perseae (scale insect).....	Orchid (2).
Conchaspis angræci (scale insect).....	Orchid (1).
Monomorium carbonarium F. Smith subsp. ebeninum (ant).....	Do.
<b>Disease:</b>	
Colletotrichum gloeosporioides.....	Do.
<b>CANARY ISLANDS.</b>	
<b>Insect:</b>	
Diaspis carueli (juniper scale).....	Juniperus cedrus, Palm var. (1).
<b>CEYLON.</b>	
<b>Disease:</b>	
Lasiodiplodia sp.....	Garcinia mangostana (Mangosteens) (1).
<b>CHILE.</b>	
<b>Disease:</b>	
Diplodia sp.....	Persea (Avocado) (1).
<b>CHINA.</b>	
<b>Insects:</b>	
Bruchus chinensis (Bruchidae).....	Red beans (1).
Eriococcus sp. (scale insect).....	Diospyros (1).
Lepidosaphes beckii (purple scale).....	Ichang lemon (1).
Lepidosaphes sp. (scale insect).....	Diospyros (1).
Parlatoria chinensis (scale insect).....	Pyrus sinensis (1).
Pyralid larva.....	Rice plant (1).
Sciara sp. (fungus gnat).....	? (1).
Tyroglyphus cocciphilus (mite).....	Yunnan pear (1).
<b>Diseases:</b>	
Lasiodiplodia sp.....	Litchi chinensis (2).
Ustilago sp.....	Cynodon dactylon (1).

## List, by countries, of pests collected—Continued.

Country of origin and name of pest.	Host.
<b>COLOMBIA.</b>	
<b>Insects:</b>	
<i>Aspidiotus destructor</i> (scale insect).....	Coconut palm (1).
<i>Blaberus</i> sp. (roach).....	Orchid (1).
<i>Blattella</i> sp. (roach).....	Do.
<i>Chrysomphalus perseæ</i> (scale insect).....	Orchid (3).
<i>Chrysomphalus personatus</i> (masked scale).....	Orchid (1).
<i>Cyphomyrmex salvini</i> Forel, new var. (ant).....	Do.
<i>Diaspis boisduvalii</i> (scale insect).....	Orchid (6).
<i>Eurycipidia splendens</i> (Miridæ).....	Orchid (3).
Gryllid of subfamily Mogisoplistinæ.....	Orchid (1).
<i>Iridomyrmex iniquus</i> Mayr., var. <i>nigellus</i> Emery (ant).....	Do.
<i>Mecistorhinus melanoleucus</i> (Pentatomidæ).....	Do.
<i>Periplaneta</i> sp. (roach).....	Orchid (2).
<i>Plocariola</i> sp. (Emesidæ).....	Orchid (1).
<i>Prenolepis longicornis</i> (ant).....	Orchid (3).
<i>Prenolepis</i> sp. (ant).....	Orchid (1).
<i>Pseudococcus</i> sp. (mealy bug).....	Do.
Pyralidæ, subfamily Phycitinæ.....	Do.
<i>Silvanus advena</i> (Cucujidæ).....	<i>Licania platypus</i> (1).
<i>Silvanus signatus</i> (Cucujidæ).....	Orchid (1).
<i>Tenthecoris bicolor</i> (Miridæ).....	Orchid (3).
<i>Tyroglyphus</i> sp. (mite).....	Avocado seeds (1).
<i>Wasmannia auropunctata</i> (ant).....	Orchid (7).
<b>COSTA RICA.</b>	
<b>Insects:</b>	
<i>Balaninus</i> sp. (Curculionidæ).....	"Fruta de pava" seeds (1).
<i>Diaspis boisduvalii</i> (scale insect).....	Orchid (1).
<i>Hemichionaspis minor</i> (scale insect).....	Hibiscus cuttings (1).
<i>Pseudococcus</i> sp. (mealy bug).....	Bunchosia sp. (1).
<b>Diseases:</b>	
<i>Fusarium</i> sp.....	<i>Maranta</i> sp. (1).
<i>Phoma</i> sp.....	<i>Dormilona amarilla</i> (1).
<b>CUBA.</b>	
<b>Insects:</b>	
<i>Caulophilus latinasus</i> (Curculionidæ).....	Avocado seeds (1).
<i>Chionaspis</i> sp. (scale insect).....	Royal palm (1).
<i>Chrysomphalus</i> sp. (scale insect).....	<i>Roystonea regia</i> (seeds of) (1).
<i>Coccus mangiferæ</i> (mango scale).....	Mango (1).
<i>Diaspis boisduvalii</i> (scale insect).....	Palm (1).
<i>Hemichionaspis aspidistra</i> (aspidistra scale).....	Royal palm (1).
<i>Hemichionaspis minor</i> (scale insect).....	<i>Roystonea regia</i> (seeds of) (1).
<i>Hermetia illucens</i> (Stratiomyidæ).....	Avocado seeds (1).
<i>Lepidosaphes</i> sp. (scale insect).....	Croton (1).
<i>Pheidole megacephala</i> (ant).....	Pineapple plants (1).
<i>Pseudococcus bromeliæ</i> (pineapple mealy bug).....	Pineapple (1).
<i>Rhizoglyphus hyacinthi</i> (bulb mite).....	Avocado seeds (1).
<i>Stephanoderes</i> sp. (Scolytidæ).....	<i>Erythrina corallodendron</i> (seed) (1).
<i>Targionia sacchari</i> (scale insect).....	Saccharum (1).
<i>Tetranychus sexmaculatus</i> (six-spotted mite).....	Pineapple slips (1).
<b>Diseases:</b>	
<i>Cercospora</i> sp.....	<i>Tetrastigma harmandi</i> (1).
<i>Colletotrichum gloeosporioides</i> .....	<i>Persea gratissima</i> (avocado seed) (1);
	<i>Persea</i> (avocado), (1).
<i>Diplodia</i> sp.....	<i>Persea gratissima</i> (avocado seed) (1).
<b>DENMARK.</b>	
<b>Insects:</b>	
<i>Archips</i> sp. (Tortricidæ) (eggs of).....	Danish lilacs (1).
<i>Lepidosaphes ulmi</i> (oyster-shell scale).....	Piece of apple wood in one of the cases (1).
<b>Diseases:</b>	
<i>Tubercularia</i> sp.....	Danish lilacs (1).

## List, by countries, of pests collected—Continued.

Country of origin and name of pest.	Host.
<b>DOMINICA, BRITISH WEST INDIES.</b>	
Insect: Coccus hesperidum (soft brown scale).....	Mangosteen fruits (1).
<b>DOMINICAN REPUBLIC.</b>	
Insect: Pseudococcus citri (citrus mealy bug).....	Chayota edulis (1).
Diseases:	
Botrytis sp. ....	Do.
Colletotrichum gloeosporioides.....	Chayota edulis (2).
Diplodina sp. ....	Chayota edulis (3).
Fusarium sp. ....	Chayota edulis (1).
<b>DUTCH GUIANA.</b>	
Diseases:	
Colletotrichum gloeosporioides.....	Citrus (grapefruit fruits) (1).
Exanthema.....	Do.
<b>ECUADOR.</b>	
Insects:	
Diaspis boisduvalii (scale insect).....	Palm (1).
Ponera trigona (ant).....	Palm seeds (1).
Uropoda sp. (mite).....	Do.
Disease: Cercospora sp. ....	Phytelephas (sprouted palm seed) (1).
<b>EGYPT.</b>	
Insects:	
Chrysomphalus ficus (Florida red scale).....	Terminalia arjuna (1).
Sitodrepa paniceæ (Anobiidae).....	Genista retama (1).
<b>ENGLAND.</b>	
Insects:	
Aleyrodes sp. (white fly).....	Haemanthis (1).
Aspidiotus hederae (ivy scale).....	Orchid (1), palm (4).
Aulacaspis rosæ (rose scale).....	Rosa pomifera (1), Rosa rubrifolia (1).
Bryobia pratensis (clover mite).....	Do.
Chrysomphalus dictyospermi (scale insect).....	Palm (1).
Diaspis boisduvalii (scale insect).....	Orchid plants (1).
Emphytus cinctus (sawfly) (larvae).....	Rose (1).
Pseudococcus sp. (mealy bug).....	Palm (1).
Diseases:	
Bacterium tumefaciens (crown gall).....	Rose stocks (2).
Sclerotinia fructigena.....	Peach trees (1).
<b>FRANCE.</b>	
Insects:	
Apatela auricoma (dagger moth) (pupa).....	Birch (1), Manetti stocks (1).
Aspidiotus hederae (ivy scale).....	Palm (2).
Aulacaspis rosæ (rose scale).....	Manetti stocks (1).
Balaninus sp. (Curculionidae).....	Quercus ilex seeds (1).
Chrysomphalus dictyospermi (scale insect).....	Palm (1).
Chrysomphalus ficus (Florida red scale).....	Do.
Lecanium sp. (scale insect).....	Ilex (1).
Pseudococcus sp. (mealy bug).....	Palm (1).
Diseases:	
Bacterium tumefaciens (crown gall).....	Manetti stocks (1).
Botrytis sp. ....	Canæna (1), Yucca sp. (2).
Frankia alni.....	Elæagnus sp. (on roots) (1).
<b>GERMANY.</b>	
Disease: Sclerotium sp. ....	Carduus marianus (1).
<b>GOLD COAST, AFRICA.</b>	
Disease: Lasiodiplodia sp. ....	Dumoria heckeli (seed) (1).

## List, by countries, of pests collected—Continued.

Country of origin and name of pest.	Host.
<b>GREECE.</b>	
Disease:	
Tilletia tritici.....	Wheat (1).
<b>GUATEMALA.</b>	
Insects:	
Aspidiotus camelliae (greedy scale).....	Anona cherimoya (1).
Aspidiotus lataniae (scale insect).....	Avocado bud wood (1), Persea sp. (1).
Aspidiotus subsimilis (scale insect).....	Avocado (1), Persea americana (1).
Aspidiotus sp. (scale insect).....	Avocado (2), Persea americana (1).
Calandra oryza (rice weevil).....	Zea mays seed (1).
Ceroplastes sp. (scale insect).....	Avocado (1).
Chrysomphalus dictyospermi (scale insect).....	Persea americana (1).
Chrysomphalus perseae (scale insect).....	Orchid (1).
Chrysomphalus personatus (masked scale).....	Persea americana (2).
Chrysomphalus scutiformis (scale insect).....	Avocado (1).
Coccinea.....	Avocado (1), Persea americana (1).
Coccotrypes sp. (Scolytidae).....	Pacaya palm (1).
Conotrachelus n. sp. (Curculionidae).....	Avocado (1).
Diaspis boisduvalii (scale insect).....	Persea americana (1).
Diaspis sp. (scale insect).....	Avocado (2).
Lepidosaphes mimosarum (scale insect).....	Anona cherimoya (1).
Mordellistena n. sp. (Mordellidae).....	Nephrolepis sp. (1).
Parallelodiplosis cattleyae (Cattleya midge).....	Orchid (1).
Periplaneta australasiae (Australian roach).....	Avocado seed (1).
Pheidole anastasi var. cellarum (ant).....	? (1).
Pseudococcus sp. (mealy bug).....	Orchid (1).
Pseudoparlatoria ostreata (scale insect).....	Avocado (1).
Pyralid larva.....	Carica papaya (1).
Sciara sp. (Mycetophilidae).....	Nephrolepis sp. (1).
Skalistes vidua (Forficulidae).....	Avocado seed (1).
Wasmannia auropunctata (ant).....	Nephrolepis sp. (1).
Diseases:	
Colletotrichum gloeosporioides.....	Persea americana (1), Persea gratissima (avocado seed) (1), Persea (avocado bud-wood) (1), Persea sp. (1).
Diplodia perseana.....	Persea sp. (1).
Fusarium sp.....	Do.
Pestalozzia sp.....	Achradelpha viridis (1).
<b>HAITI.</b>	
Insects:	
Cardiastethus elegans (Anthocoridae).....	Cotton seed (1).
Dysdercus andreae (Pyrrhocoridae).....	Cotton seed and bolls (1).
<b>HAWAII.</b>	
Insects:	
Fiorinia fioriniae (scale insect).....	Mango (1).
Howardia biclavis (mining scale).....	Do.
Disease:	
Gloeosporium clausenae.....	Clausena wampi (seeds) (1).
<b>HOLLAND.</b>	
Insects:	
Acarina eggs.....	Magnolia (1).
Agelastica alni (Chrysomelid).....	Boxwood (3).
Aleyrodes sp. (white fly).....	Azalea (4), rhododendron (1).
Aphis tulipae.....	Iris nigricans (1).
Aphodius fimetarius (Scarabaeidae).....	Rhododendron (1).
Archips sp. (Tortricidae) (empty egg mass).....	Do.
Aspidiotus hederæ (ivy scale).....	Palm (9).
Bryobia pratensis (clover mite).....	Laburnum (1), Malus (1).
Bryobia sp. (mite).....	Cytisus (1).
Chrysomphalus ficus (Florida red scale).....	Palm (1).
Chrysopa sp. (Chrysopidae).....	? (1).
Coccus hesperidum (soft brown scale).....	Bay (3), holly (1).

## List, by countries, of pests collected—Continued.

Country of origin and name of pest.	Host.
HOLLAND—continued.	
<b>Insects—Continued.</b>	
Elaterid (wireworm).....	Azalea (2), rhododendron (1), rose (1).
Gracilaria syringella (Tineidae).....	Lilac (1).
Gracilaria zachrysa (leaf miner).....	Azalea (3).
Gracilaria sp. (leaf miner).....	Azalea (1).
Hemichionaspis aspidistrae (aspidistra scale).....	Aspidistra (3).
Lecanium bituberculatum (scale insect).....	Malus (1).
Lecanium sp. (scale insect).....	Thuya (1).
Lepidosaphes ulmi (oyster-shell scale).....	Boxwood (69), evergreen seedlings (1), Malus (1), rhododendron (1), ? (1).
Malacosoma neustria (Lasiocampidae) (egg mass).....	? (1).
Miridae.....	Azalea (1).
Monarthropalpus buxi (box leaf miner).....	Evergreen shrubs (1).
Notolophus antiqua (European tussock moth) (egg masses).....	Azalea (3), Crataegus (1), Hydrangea (1), Juniperus (1), Lilac (1), Prunus pissardi (1), rose (12).
Parlatoria proteus (scale insect).....	Palm (1).
Phytomyza aquifolii (Dipterous leaf miner).....	Holly (3).
Pontia rapae (imported cabbage worm) (pupa).....	Azalea (1).
Porthesia similis (Arctiidae).....	Lilac (1), rose (1).
Pseudococcus pseudonipae (mealy bug).....	Palm (4).
Pseudococcus sp. (mealy bug).....	Bay (1), palm (2).
Psychidae.....	Kalmia (1).
Psylla buxi (box psylla) (egg stage).....	Boxwood (1).
<b>Diseases:</b>	
Bacterium tumefaciens (crown gall).....	Azalea (1), rose (1).
Botrytis cinerea.....	Hydrangea sp. (2), lilac (1), rhododendron (1), Rosa sp. (2).
Botrytis parasitica (Sclerotium tuliparum).....	Narcissus (1), Narcissus bulbs (1).
Botrytis sclerotia.....	Aucuba (1), Hydrangea (1), Rhododen- dron sp. (1), Syringa vulgaris (1).
Botrytis sp.....	Lilac (4) rose (5).
Botrytis sp. (sclerotia).....	Hydrangea (1).
Colletotrichum sp.....	Pigeon bean ("Duivenboon") (1).
Exobasidium sp.....	Azalea (14), evergreen shrubs (1).
Fusarium sp.....	Cytisus (1).
Gloeosporium sp.....	Boxwood (2), holly (1).
Glomerella cingulata.....	Aucuba (1).
Gymnosporangium sp.....	? (1).
Pestalozzia guepini.....	Azalea (2), Magnolia (1), rhododendron (8).
Pestalozzia sp.....	Rhododendron (6).
Phoma sp.....	Laburnum (1).
Phyllosticta sp.....	Boxwood (3).
Pitya cupressa.....	Juniperus (1).
Septoria hydrangeae.....	Hydrangea (1).
Sphaeropsis malorum.....	Malus sp. (1).
Sphaerotheca sp. (powdery mildew).....	Rose (2).
Tubercularia vulgaris.....	Lilac (1).
Tubercularia sp.....	Wistaria (1).
Verticillium buxi.....	Boxwood (4).
Volutella buxi.....	Boxwood (6).
HONDURAS.	
<b>Insect:</b>	
Solenopsis parva (ant).....	Attalea cohune seed (1).
INDIA.	
<b>Insects:</b>	
Bruchus chinensis (Bruchidae).....	Dolichos biflorus (1).
Bruchus sp. (Bruchidae).....	Dolichos lablab (1), English walnuts (1).
Calandra oryza (rice weevil).....	Bambusa tulda seed (1).
Ephestia cautella (fig moth).....	English walnuts (1).
Ephestia sp.....	Do.
Rhizopertha dominica (lesser grain borer).....	Holcus sorghum (1), Panicum miliaceum (1), wheat (1).
Silvanus surinamensis (saw-toothed grain beetle).....	Ægle marmelos (1).

## List, by countries, of pests collected—Continued.

Country of origin and name of pest.	Host.
INDIA—continued.	
Insects—Continued.	
<i>Sternuchetus mangiferæ</i> (mango weevil).....	Mango seeds (1).
<i>Tribolium confusum</i> (confused flour beetle).....	English walnuts (1).
<i>Tribolium ferrugineum</i> (Tenebrionidae).....	<i>Holcus sorghum</i> (1).
Diseases:	
<i>Caryospora putaminum</i> .....	<i>Buchanania latifolia</i> seeds (1).
<i>Glœosporium mangiferæ</i> .....	Mango (3).
IRELAND.	
Disease:	
<i>Uromyces caryophyllinus</i> .....	<i>Dianthus</i> (Carnation plants) (1).
ITALY.	
Insects:	
<i>Aspidiotus hederæ</i> (ivy scale).....	<i>Jasminum azoricum</i> (1).
<i>Bruchus rufimanus</i> (broad-bean weevil).....	Horse beans (3).
<i>Bruchus</i> sp. (Bruchidae).....	Horse beans (2).
<i>Prenolepis longicornis</i> (ant).....	Cacti (1), grasses (1), palm (1).
Disease:	
<i>Colletotrichum lindemuthianum</i> .....	Horse beans (9).
JAMAICA.	
Insects:	
<i>Diaspis boisduvalii</i> (scale insect).....	Orchid (1).
<i>Vinsonia stellifera</i> (stellate scale).....	Orchid (1), ? (1).
JAPAN.	
Insects:	
<i>Calandra oryza</i> (rice weevil).....	Wheat (1).
<i>Chrysomphalus ficus</i> (Florida red scale).....	<i>Aspidistra</i> (1).
<i>Cicada</i> eggs.....	Persimmon (1).
<i>Hemichionaspis aspidistræ</i> (aspidistra scale).....	<i>Aspidistra</i> (3).
<i>Pseudaonidia duplex</i> (scale insect).....	<i>Azalea</i> (1), <i>Camellia</i> (3), <i>Pyrus</i> (1).
<i>Pseudaonidia trilobitiformis</i> (scale insect).....	Citrus cuttings (1).
<i>Pyralid larva</i> (dead).....	<i>Kœlreuteria formosana</i> (1).
<i>Thyridopteryx</i> sp. (bagworm).....	<i>Daphne</i> (1), ? (1).
MAURITIUS.	
Disease:	
<i>Melanconium sacchari</i> .....	<i>Saccharum officinarum</i> (sugar cane) (1).
MEXICO.	
Insect:	
<i>Tyroglyphus lintneri</i> (mite).....	<i>Acrocomia sclerocarpa</i> (palm seeds) (1).
NATAL, SOUTH AFRICA.	
Insect:	
<i>Diaspis bromeliæ</i> (scale insect).....	Pineapple (1).
NEWFOUNDLAND.	
Insect:	
<i>Orthezia cataphracta</i> (scale insect).....	<i>Iris setosa</i> (1).
NEW ZEALAND.	
Insects:	
<i>Aspidiotus camelliæ</i> (greedy scale).....	<i>Areca baueri</i> (1), <i>Diosma</i> sps. (1), <i>Drimys colorata</i> (1), pear (1), <i>Pennantia corymbosa</i> (1), <i>Veronica</i> sps. (1).
<i>Aspidiotus hederæ</i> (ivy scale).....	Palm (1).
<i>Aspidiotus perniciosus</i> (San Jose scale).....	Peach (1).
<i>Chionaspis</i> sp. (scale insect).....	Orchid (1).
Psyllid.....	? (1).
<i>Saissetia oleæ</i> (black scale).....	<i>Diosma</i> sps. (1).
Diseases:	
<i>Cladosporium carpophilum</i> .....	Peach (1).
<i>Colletotrichum glœosporioides</i> .....	Orange (1).

## List, by countries, of pests collected—Continued.

Country of origin and name of pest.	Host.
NICARAGUA.	
Insect: Stephanoderes sp. (Scolytidae).....	"Vine used as cure for paralysis" (1).
NORTHERN NIGERIA.	
Insect: Pseudococcus citri (citrus mealy bug).....	Yam (1).
PANAMA.	
Insects: Chrysomphalus perseæ (scale insect).....	Orchid (1).
Diaspis boisduvalii (scale insect).....	Do.
Lepidosaphes sp. (scale insect).....	Agave (1).
PERU.	
Disease: Colletotrichum sp. ....	Canarios beans (1).
PHILIPPINE ISLANDS.	
Insect: Chrysomphalus aurantii (red scale of California).....	Mabolo cuttings (1).
Disease: Lasiodiplodia sp. ....	Mangifera verticillata (1).
PORTUGAL.	
Insect: Aspidiotus hederæ (ivy scale) .....	Carob pods (1).
RUSSIA.	
Insect: Bruchus rufimanus (broad-bean weevil).....	Horse bean (1).
Diseases: Claviceps purpurea.....	Barley (1), rye (2), wheat (2).
Tilletia tritici.....	Wheat (1).
Ustilago sp. ....	Agropyron cristatum (1).
SCOTLAND.	
Insects: Aspidiotus hederæ (ivy scale) .....	Palm (1).
Chrysomphalus ficus (Florida red scale).....	Do.
Pseudococcus sp. (mealy bug).....	Do.
SOCIETY ISLANDS.	
Disease: Phyllachora coicis.....	Coix sp. (1).
SPAIN.	
Disease: Microsphaera quercina.....	Oak (1).
STRAITS SETTLEMENTS.	
Insects: Hemichionaspis minor (scale insect).....	Pineapple (1).
Pycnoscelus surinamensis (Blattidae).....	Ananas sativus Mauritius (1).
Tetramorium simillimum (ant).....	Ananas sativus (1).
Diseases: Diplodia sp. ....	Garcinia mangostana (seeds) (1).
TURKS ISLANDS, BRITISH WEST INDIES.	
Insect: Coleophora sp. (Elachistidae).....	Cactus (1).
VENEZUELA.	
Insects: Bactrodes biannulatus (Reduviidae).....	Orchid (1).
Diaspis boisduvalii (scale insect).....	Orchid (4).

## LIST, BY STATES, OF PESTS COLLECTED.

[The number in parentheses following name of country indicates the number of times reported.]

State in which collected and name of pest.	Host.	Country of origin.
<b>CALIFORNIA.</b>		
<b>Insects:</b>		
Aleyrodes sp. (white fly).....	Azalea.....	Belgium (3), Holland (1).
Aspidiotus britannicus (scale insect).....	Bay.....	Belgium (9).
Aspidiotus camelliae (greedy scale).....	Areca baueri.....	New Zealand (1).
Do.....	Diosma sp.....	Do.
Do.....	Drimys colorata.....	Do.
Do.....	Pennantia corymbosa.....	Do.
Do.....	Veronica sps.....	Do.
Aspidiotus hederæ (ivy scale).....	Bay.....	Belgium (1).
Do.....	Palm.....	New Zealand (1).
Chionaspis sp (scale insect).....	Orchid.....	Do.
Chrysomphalus ficus (Florida red scale).....	Aspidistra.....	Japan (1).
Cicada eggs.....	Persimmon.....	Do.
Coccus hesperidum (soft brown scale).....	Bay.....	Belgium (10).
Do.....	Holly.....	Holland (1).
Diaspis boisduvalii (scale insect).....	Orchid.....	Brazil (2), England (1).
Hemichionaspis aspidistræ (aspidistra scale).....	Aspidistra.....	Japan (2).
Lepidosaphes ulmi (oyster-shell scale).....	Boxwood.....	Holland (28).
Pseudonidia duplex (scale insect).....	Camellia.....	Japan (2).
Do.....	Pyrus.....	Japan (1).
Pseudococcus sp. (mealy bug).....	Orchid.....	Brazil (1).
Psyllid.....	?.....	New Zealand (1).
Saissetia oleæ (black scale).....	Diosma sps.....	Do.
Thrips.....	Azalea.....	Belgium (1).
Thyridopteryx sp. (bagworm).....	Daphne.....	Japan (1).
Do.....	?.....	Do.
Trioxa alacris (Psyllidæ).....	Bay.....	Belgium (1).
<b>CONNECTICUT.</b>		
<b>Insects:</b>		
Aleyrodes sp. (white fly).....	Azalea.....	Belgium (1).
Lepidosaphes ulmi (oyster-shell scale).....	Boxwood.....	Holland (2).
Malacosoma neustria (Lasiocampidæ) (egg mass).....	?.....	Holland (1).
<b>Diseases:</b>		
Bacterium tumefaciens (crown gall).....	Rose stocks.....	England (1).
Exobasidium.....	Azalea.....	Belgium (27), Holland (1).
Do.....	Evergreen shrubs.....	Holland (1).
Glomerella cingulata.....	Palm.....	Belgium (2).
Pestalozzia guepini.....	Rhododendron.....	Holland (1).
<b>DELAWARE.</b>		
<b>Disease:</b>		
Bacterium tumefaciens (crown gall).....	Rose.....	Holland (1).
<b>DISTRICT OF COLUMBIA.</b>		
<b>Insects:</b>		
Aleyrodes sp. (white fly).....	Azalea.....	Belgium (7).
Aphis tulipæ.....	Iris nigricans.....	Holland (1).
Archips sp. (Tortricidæ) (eggs).....	Danish lilacs.....	Denmark (1).
Do.....	Rhododendron.....	Holland (1).
Aspidiotus camelliae (greedy scale).....	Anona cherimoya.....	Guatemala (1).
Do.....	Pear.....	New Zealand (1).
Do.....	Persea azorica.....	Azores Islands (1).
Aspidiotus hederæ (ivy scale).....	Carob pods.....	Portugal (1).
Do.....	Jasminum azoricum.....	Italy (1).
Do.....	Palm.....	Belgium (1).
Aspidiotus latanise (scale insect).....	Avocado bud wood.....	Guatemala (1).
Do.....	Persea sp.....	Do.
Aspidiotus perniciosus (San Jose scale).....	Peach.....	New Zealand (1).
Aspidiotus subsimilis (scale insect).....	Avocado.....	Guatemala (1).
Do.....	Persea americana.....	Do.
Aspidiotus sp. (scale insect).....	Avocado.....	Guatemala (2).
Do.....	Persea americana.....	Guatemala (1).

## List, by States, of pests collected—Continued.

State in which collected and name of pest.	Host.	Country of origin.
DISTRICT OF COLUMBIA—continued.		
Insects—Continued.		
Aulacaspis rosæ (rose scale) .....	Rosa pomifera .....	England (1).
Do. ....	Rosa rubrifolia .....	Do.
Balaninus sp. (Curculionidæ) .....	"Fruta de pava" seeds .....	Costa Rica (1).
Do. ....	Quercus ilex seeds .....	France (1).
Bruchus chinensis (Bruchidæ) .....	Dolichos biflorus .....	India (1).
Do. ....	Red beans .....	China (1).
Bruchus rufimanus (broad-bean weevil) .....	Horse bean .....	Italy (3), Russia (1).
Bruchus sp. (Bruchidæ) .....	Dolichos lablab .....	India (1).
Do. ....	English walnuts .....	Do.
Do. ....	Horse bean .....	Italy (2).
Bryobia pratensis (clover mite) .....	Laburnum .....	Holland (1).
Do. ....	Malus .....	Do.
Do. ....	Rosa pomifera .....	England (1).
Do. ....	Rosa rubrifolia .....	Do.
Bryobia sp. (mite) .....	Cytisus .....	Holland (1).
Calandra oryza (rice weevil) .....	Albizia fastigiata, seeds of .....	Angola, Africa (1).
Do. ....	Bambusa tulda seed .....	India (1).
Do. ....	Wheat .....	Japan (1).
Do. ....	Zea mays seed .....	Guatemala (1).
Cardiastethus elegans (Anthocoridæ) .....	Cotton seed .....	Haiti (1).
Caulophilus latinasus (Curculionidæ) .....	Avocado seeds .....	Cuba (1).
Ceroplastes sp. (scale insect) .....	Avocado .....	Guatemala (1).
Chrysomphalus aurantii (red scale of California) .....	Mabolo cuttings .....	Philippine Islands (1).
Chrysomphalus dictyospermi (scale insect) .....	Persea americana .....	Guatemala (1).
Chrysomphalus ficus (Florida red scale) .....	Terminalia arjuna .....	Egypt (1).
Chrysomphalus personatus (masked scale) .....	Persea americana .....	Guatemala (2).
Chrysomphalus scutiformis (scale insect) .....	Avocado .....	Guatemala (1).
Chrysomphalus sp. (scale insect) .....	Roystonea regia, seeds of .....	Cuba (1).
Coccinæ .....	Avocado .....	Guatemala (1).
Do. ....	Persea americana .....	Do.
Coccotrypes sp. (Scolytidæ) .....	Pacaya palm .....	Do.
Coccus hesperidum (soft brown scale) .....	Mangosteen fruits .....	Dominica, B. W. I. (1).
Coleophora sp. (Elachistidæ) .....	Cactus .....	Turks Islands, B. W. I. (1).
Conotrachelus n. sp. (Curculionidæ) .....	Avocado .....	Guatemala (1).
Diaspis boisduvalii (scale insect) .....	Palm .....	Ecuador (1).
Do. ....	Persea americana .....	Guatemala (1).
Diaspis bromeliæ (scale insect) .....	Pineapple .....	Natal, South Africa (1).
Diaspis carueli (juniper scale) .....	Juniperus cedrus, Palm var. .....	Canary Islands (1).
Diaspis sp. (scale insect) .....	Avocado .....	Guatemala (2).
Dysdercus andree (Pyrrhocoridæ) .....	Cotton seed and bolls .....	Haiti (1).
Ephestia cautella (fig moth) .....	English walnuts .....	India (1).
Ephestia sp. ....	do. ....	Do.
Eriococcus sp. (scale insect) .....	Diospyros .....	China (1).
Fiorinia florinæ (scale insect) .....	Mango .....	Hawaii (1).
Gracilaria syringella (Tineidæ) .....	Lilac .....	Holland (1).
Hemichionaspis aspidistra (aspidistra scale) .....	Royal palm .....	Cuba (1).
Hemichionaspis minor (scale insect) .....	Pineapple .....	Straits Settlements (1).
Do. ....	Roystonea regia, seeds of .....	Cuba (1).
Hermetia illucens (Stratiomyidæ) .....	Avocado seeds .....	Do.
Howardia biclavus (mining scale) .....	Carob cuttings .....	Bermuda (1).
Do. ....	Mango .....	Hawaii (1).
Lecanium bituberculatum (scale insect) .....	Malus .....	Holland (1).
Lepidosaphes beckii (purple scale) .....	Ichang lemon .....	China (1).
Lepidosaphes mimosarum (scale insect) .....	Anona cherimoya .....	Guatemala (1).
Lepidosaphes ulmi (oyster-shell scale) .....	Apple wood, piece of, in one of the cases .....	Denmark (1).
Do. ....	Boxwood .....	Holland (8).
Do. ....	Malus .....	Holland (1).
Lepidosaphes sp. (scale insect) .....	Diospyros .....	China (1).
Liopus sp. (Cerambycidæ) .....	Brazil nut .....	Brazil (1).
Mordellistena n. sp. (Mordellidæ) .....	Nephrolepis sp. ....	Guatemala (1).
Notolophus antiqua (European tussock moth) (eggs) .....	Azalea .....	Holland (2).
Do. ....	Lilac .....	Holland (1).

## List, by States, of pests collected—Continued.

State in which collected and name of pest.	Host.	Country of origin.
DISTRICT OF COLUMBIA—continued.		
Insects—Continued.		
<i>Orthezia cataphracta</i> (scale insect).....	<i>Iris setosa</i> .....	Newfoundland (1).
<i>Parlatoria chinensis</i> (scale insect).....	<i>Pyrus sinensis</i> .....	China (1).
<i>Periplaneta australasiae</i> (Australian roach).....	Avocado seed.....	Guatemala (1).
<i>Pheidole anastasiae</i> var. <i>cellarum</i> (ant).....	?.....	Do.
<i>Ponera trigona</i> (ant).....	Palm seeds.....	Ecuador (1).
<i>Porthesia similis</i> (Arctiidae).....	Lilac.....	Holland (1).
<i>Pseudaonidia trilobitiformis</i> (scale insect).....	Citrus cuttings.....	Japan (1).
<i>Pseudococcus bromeliae</i> (pineapple mealy bug).....	Pineapple.....	Australia (2).
<i>Pseudococcus citri</i> (citrus mealy bug).....	Chayota edulis.....	Dominican Republic (1).
Do.....	Yam.....	Northern Nigeria (1).
<i>Pseudococcus</i> sp. (mealy bug).....	<i>Bunchosia</i> sp.....	Costa Rica (1).
Do.....	Chayota edulis.....	Brazil (1).
<i>Pseudoparlatoria ostreata</i> (scale insect).....	Avocado.....	Guatemala (1).
<i>Pycnoscelus surinamensis</i> (Blattidae).....	<i>Ananas sativus</i> Mauritius.....	Straits Settlements (1).
Pyralid larva.....	<i>Carica papaya</i> .....	Guatemala (1).
Do.....	<i>Koelreuteria formosana</i> .....	Japan (1).
Do.....	Rice plant.....	China (1).
<i>Rhizoglyphus hyacinthi</i> (bulb mite).....	Avocado seeds.....	Cuba (1).
<i>Rhizopertha dominica</i> (lesser grain borer).....	<i>Holcus sorghum</i> .....	India (1).
Do.....	<i>Panicum miliaceum</i> .....	Do.
Do.....	Wheat.....	Do.
<i>Saissetia hemisphaerica</i> (hemispherical scale).....	Palm.....	Belgium (1).
<i>Saissetia oleae</i> (black scale).....	Chayota edulis.....	Brazil (1).
<i>Sciara</i> sp. (Mycetophilidae).....	<i>Nephrolepis</i> sp.....	Guatemala (1).
Do.....	?.....	China (1).
<i>Silvanus advena</i> (Cucujidae).....	<i>Licania platypus</i> .....	Colombia (1).
<i>Silvanus surinamensis</i> (saw-toothed grain beetle).....	<i>Egle marmelos</i> .....	India (1).
<i>Sitodrepa panicea</i> (Anobiidae).....	<i>Genista retama</i> .....	Egypt (1).
<i>Sitotroga cerealella</i> (Angoumois grain moth).....	Maiz cuarenton.....	Argentina (1).
<i>Skalistes vidua</i> (Forficulidae).....	Avocado seed.....	Guatemala (1).
<i>Solenopsis parva</i> (ant).....	<i>Attalea cohune</i> seed.....	Honduras (1).
<i>Stephanoderes</i> sp. (Scolytidae).....	<i>Erythrina corallodendron</i> (seed).....	Cuba (1).
Do.....	"Vine used as cure for paralysis."	Nicaragua (1).
<i>Sternochetus mangiferae</i> (mango weevil).....	Mango seeds.....	India (1).
<i>Targionia sacchari</i> (scale insect).....	Saccharum.....	Cuba (1).
<i>Tetramorium simillimum</i> (ant).....	<i>Ananas sativus</i> .....	Straits Settlements (1).
Thrips.....	Azalea.....	Belgium (2).
<i>Tribolium confusum</i> (confused flour beetle).....	English walnuts.....	India (1).
<i>Tribolium ferrugineum</i> (Tenebrionidae).....	<i>Holcus sorghum</i> .....	Do.
<i>Tyroglyphus cocciphilus</i> (mite).....	Yunnan pear.....	China (1).
<i>Tyroglyphus lintneri</i> (mite).....	<i>Acrocomia sclerocarpa</i> (palm seeds).....	Mexico (1).
<i>Tyroglyphus</i> sp. (mite).....	Avocado seeds.....	Colombia (1).
<i>Uropoda</i> sp. (mite).....	Palm seeds.....	Ecuador (1).
<i>Wasmannia auropunctata</i> (ant).....	<i>Nephrolepis</i> sp.....	Guatemala (1).
Diseases:		
<i>Botrytis cinerea</i> .....	<i>Hydrangea</i> .....	Holland (2).
Do.....	Lilac.....	Holland (1).
Do.....	<i>Rhododendron</i> .....	Do.
Do.....	<i>Rosa</i> sp.....	Holland (2).
<i>Botrytis parasitica</i> ( <i>Sclerotium tuliparum</i> ).....	<i>Narcissus</i> .....	Holland (1).
Do.....	<i>Narcissus bulbis</i> .....	Do.
<i>Botrytis sclerotia</i> .....	<i>Aucuba</i> .....	Do.
Do.....	<i>Hydrangea</i> .....	Do.
Do.....	<i>Rhododendron</i> .....	Do.
Do.....	<i>Syringa vulgaris</i> .....	Do.
<i>Botrytis</i> sp.....	<i>Canna</i> .....	France (1).
Do.....	Lilac.....	Holland (2).
Do.....	Rose.....	Holland (5).
Do.....	Chayota edulis.....	Dominican Republic (1).

## List, by States, of pests collected—Continued.

State in which collected and name of pest.	Host.	Country of origin.
DISTRICT OF COLUMBIA—continued.		
Diseases—Continued.		
Botrytis sp.	Syringa vulgaris.	Holland (1).
Do.	Syringa sp.	Do.
Botrytis sp. (sclerotia).	Hydrangea.	Do.
Caryospora putaminum.	Buchanania latifolia seeds.	India (1).
Cercospora sp.	Phytelephas (sprouted palm seed).	Ecuador (1).
Cladosporium carpophilum.	Peach.	New Zealand (1).
Claviceps purpurea.	Barley.	Russia (1).
Do.	Rye.	Russia (2).
Do.	Wheat.	Do.
Colletotrichum gloeosporioides.	Citrus (grapefruit fruits).	Dutch Guiana (1).
Do.	Citrus (best seedless orange).	New Zealand (1).
Do.	Persea americana.	Guatemala (1).
Do.	Persea gratissima (avocado seed).	Cuba (1), Guatemala (1).
Do.	Persea sp.	Guatemala (1).
Do.	Persea (avocado).	Cuba (1).
Do.	Persea (avocado budwood).	Guatemala (1).
Do.	Chayota edulis.	Dominican Republic (2).
Colletotrichum lindemuthianum.	Horse bean.	Italy (9).
Colletotrichum sp.	Canarios beans.	Peru (1).
Do.	Pigeon bean ("Duivenboon").	Holland (1).
Coniothyrium sp.	Pyrus communis.	Canada (3).
Diplodia perseana.	Persea sp.	Guatemala (1).
Diplodia sp.	Garcinia mangostana (seeds).	Straits Settlements (1).
Do.	Persea gratissima (avocado seed).	Cuba (1).
Do.	Persea (avocado).	Chile (1).
Do.	Chayota edulis.	British West Indies (1).
Do.	do.	Brazil (1).
Do.	do.	Dominican Republic (3).
Exanthema.	Citrus (grapefruit fruits).	Dutch Guiana (1).
Exobasidium sp.	Azalea.	Belgium (11), Holland (3).
Fusarium sp.	Cytisus.	Holland (1).
Do.	Maranta sp.	Costa Rica (1).
Do.	Persea sp.	Guatemala (1).
Do.	Chayota edulis.	Dominican Republic (1).
Gloeosporium clausenæ.	Clausena wampi (seeds).	Hawaii (1).
Gloeosporium mangiferae.	Mango.	India (3).
Gloeosporium sp.	Boxwood.	Holland (2).
Do.	Holly.	Holland (1).
Glomerella cingulata.	Aucuba.	Do.
Heterodera radiculicola (nematode).	Rosa.	Australia (1).
Lasioidiplodia sp.	Dumoria heckeli (seed).	Gold Coast, Africa (1).
Do.	Garcinia mangostana (Mango-steens).	Ceylon (1).
Do.	Litchi chinensis.	China (2).
Do.	Mangifera verticillata.	Philippine Islands (1).
Macrosporium sp.	Atriplex semibaccata.	Australia (1).
Melanconium sacchari.	Saccharum officinarum (sugar cane).	Australia (1), Mauritius (1).
Microsphaera quercina.	Oak.	Spain (1).
Oospora scabies (common scab).	Irish potato.	Canada (1).
Pestalozzia guepini.	Azalea.	Belgium (4), Holland (2).
Do.	Rhododendron.	Belgium (1), Holland (5).
Pestalozzia sp.	Achradelpha viridis.	Guatemala (1).
Do.	Rhododendron.	Holland (1).
Phoma sp.	Atriplex nummularia.	Australia (1).
Do.	Dormilona amarilla.	Costa Rica (1).
Do.	Laburnum.	Holland (1).
Do.	Schinopsis lorentzi.	Argentina (1).
Phyllachora coicis.	Coix sp.	Society Islands (1).
Phyllosticta sp.	Azalea.	Belgium (1).
Do.	Boxwood.	Holland (3).

## List, by States, of pests collected—Continued.

State in which collected and name of pest.	Host.	Country of origin.
DISTRICT OF COLUMBIA—continued.		
Diseases—Continued.		
Sclerotium sp.....	Carduus marianus.....	Germany (1).
Sphaeropsis salicicola.....	Salix.....	Belgium (1).
Tilletia tritici.....	Wheat.....	Greece (1), Russia (1).
Tubercularia vulgaris.....	Lilac.....	Holland (1).
Tubercularia sp.....	Danish lilacs.....	Denmark (1).
Do.....	Wistaria.....	Holland (1).
Uromyces caryophyllinus.....	Dianthus (carnation plants)...	Ireland (1).
Ustilago sp.....	Agropyron cristatum.....	Russia (1).
Do.....	Cynodon dactylon.....	China (1).
Verticillium buxi.....	Boxwood.....	Holland (4).
Volutella buxi.....	do.....	Holland (6).
FLORIDA.		
Insects:		
Aleyrodes sp. (white fly).....	Azalea.....	Belgium (1).
Chionaspis sp. (scale insect).....	Royal palm.....	Cuba (1).
Coccus mangiferæ (scale insect).....	Mango.....	Do.
Hemichionaspis aspidistræ (aspidistra scale)...	Asplenium diversifolium.....	Australia (1).
Do.....	Davallia fijiensis ornata.....	Do.
Tetranychus sexmaculatus (six-spotted mite)...	Pineapple slips.....	Cuba (1).
Disease:		
Cercospora sp.....	Tetrastigma harmandi.....	Do.
GEORGIA.		
Insects:		
Aspidiotus britannicus (scale insect).....	Bay.....	Belgium (3).
Notolophus antiqua (European tussock moth) (egg masses).	Rose.....	Holland (4).
Porthesia similis (Arctiidae).....	do.....	Holland (1).
ILLINOIS.		
Insects:		
Aspidiotus britannicus (scale insect).....	Bay.....	Belgium (1).
Coccus hesperidum (soft brown scale).....	do.....	Do.
Thrips.....	Azalea.....	Do.
Tortricid pupa.....	Bay.....	Do.
INDIANA.		
Insects:		
Aspidiotus hederæ (ivy scale).....	Palm.....	Belgium (2), Holland (5).
Emphytus cinctus (sawfly).....	Rose.....	England (1).
Gracilaria sp. (leaf miner).....	Azalea.....	Holland (1).
Hemichionaspis aspidistræ (aspidistra scale)...	Aspidistra.....	Belgium (1).
Notolophus antiqua (European tussock moth) (egg mass).	Rose.....	Holland (1).
Pierid pupa.....	Azalea.....	Belgium (1).
Pseudococcus pseudonipæ (mealy bug).....	Palm.....	Belgium (1), Holland (4).
Diseases:		
Exobasidium sp.....	Azalea.....	Belgium (39), Holland (1).
Do.....	Evergreen shrubs.....	Belgium (1).
Frankia alni.....	Eleagnus sp. (on roots).....	France (1).
Pestalozzia guepini.....	Magnolia.....	Holland (1).
Do.....	Rhododendron.....	Holland (2).
Pestalozzia sp.....	do.....	Do.
Sphaeropsis malorum.....	Malus sp.....	Holland (1).
IOWA.		
Insects:		
Aleyrodes sp. (white fly).....	Azalea.....	Belgium (2), Holland (1).
Notolophus antiqua (European tussock moth) (egg cluster).	Hydrangea.....	Holland (1).
Do.....	Prunus pissardi.....	Do.
Do.....	Rose.....	Holland (3).
Disease:		
Exobasidium sp.....	Azalea.....	Belgium (13).

## List, by States, of pests collected—Continued.

State in which collected and name of pest.	Host.	Country of origin.
<b>KANSAS.</b>		
<b>Insects:</b>		
Aleyrodes sp. (white fly).....	Azalea.....	Holland (1).
Lepidosaphes ulmi (oyster-shell scale).....	Boxwood.....	Do.
<b>KENTUCKY.</b>		
<b>Insects:</b>		
Coccus hesperidum (soft brown scale).....	Bay.....	Belgium (2), Holland (1).
Lepidosaphes ulmi (oyster-shell scale).....	Boxwood.....	Holland (5).
<b>Disease:</b>		
Exobasidium sp.....	Azalea.....	Belgium (2).
<b>LOUISIANA.</b>		
<b>Insect:</b>		
Coccus hesperidum (soft brown scale).....	Bay.....	Belgium (1).
<b>MARYLAND.</b>		
<b>Insects:</b>		
Aleyrodes sp. (white fly).....	Azalea.....	Belgium (2).
Do.....	Rhododendron.....	Holland (1).
Chrysopa sp. (Chrysopidae).....	?.....	Do.
Lepidosaphes ulmi (oyster-shell scale).....	Boxwood.....	Do.
Thrips.....	Azalea.....	Belgium (1).
<b>Diseases:</b>		
Exobasidium sp.....	do.....	Belgium (3), Holland (1).
Septoria hydrangæ.....	Hydrangea.....	Holland (1).
Sphaerotheca sp. (powdery mildew).....	Rose.....	Holland (2).
<b>MASSACHUSETTS.</b>		
<b>Insects:</b>		
Acarina eggs.....	Magnolia.....	Holland (1).
Agelastica alni (Chrysomelid).....	Boxwood.....	Holland (3).
Aphodius fimetarius (Scarabaeidæ).....	Rhododendron.....	Holland (1).
Aspidiotus hederæ (ivy scale).....	Palm.....	Belgium (6), Holland (1).
Chrysomphalus ficus (Florida red scale).....	do.....	Belgium (1).
Elaterid (wireworm).....	Rhododendron.....	Holland (1).
Gracilaria zachrysa (leaf miner).....	Azalea.....	Belgium (58).
Lecanium sp. (scale insect).....	Ilex.....	France (1).
Do.....	Thuja.....	Holland (1).
Lepidosaphes ulmi (oyster-shell scale).....	Boxwood.....	Holland (6).
Do.....	Rhododendron.....	Holland (1).
Miridæ.....	Azalea.....	Do.
Noctuid larva.....	do.....	Belgium (1).
Notolophus antiqua (European tussock moth) (egg mass).....	Juniperus.....	Holland (1).
Do.....	Rose.....	Holland (4).
Peronea schalleriana (Tortricid).....	Azalea.....	Belgium (6).
Phytomyza aquifolii (Dipterous leaf miner).....	Holly.....	Holland (1).
Pontia rapæ (imported cabbage worm) (pupa).....	Azalea.....	Do.
Psychidæ.....	Kalmia.....	Do.
<b>Diseases:</b>		
Exobasidium sp.....	Azalea.....	Belgium (32), Holland (1).
Phytophthora infestans.....	Irish potato.....	Canada (1).
Pitya cupressa.....	Juniperus.....	Holland (1).
<b>MISSOURI.</b>		
<b>Insects:</b>		
Aleyrodes sp. (white fly).....	Azalea.....	Holland (1).
Do.....	Bay.....	Belgium (1).
Do.....	Rhododendron.....	Do.
Aspidiotus hederæ (ivy scale).....	Palm.....	Belgium (1), Holland (1).
Chrysomphalus ficus (Florida red scale).....	do.....	Do.
Hemichionaspis aspidistra (aspidistra scale).....	Aspidistra.....	Belgium (2), Holland (1).
Parlatoria proteus (scale insect).....	Palm.....	Belgium (1), Holland (1).

## List, by States, of pests collected—Continued.

State in which collected and name of pest.	Host.	Country of origin.
<b>NEW HAMPSHIRE.</b>		
Disease:		
Bacterium tumefaciens (crown gall).....	Rose stocks.....	England (1).
<b>NEW JERSEY.</b>		
Insects:		
Aspidiotus britannicus (scale insect).....	Bay.....	Belgium (1).
Aspidiotus hederæ (ivy scale).....	Orchid.....	England (1).
Do.....	Palm.....	Belgium (12), England (4), France (2), Holland (2), Scotland (1).
Blaberus sp. (roach).....	Orchid.....	Colombia (1).
Chrysomphalus dictyospermi (scale insect).....	Palm.....	Belgium (1), England (1), France (1).
Chrysomphalus ficus (Florida red scale).....	do.....	France (1), Scotland (1).
Chrysomphalus perseæ (scale insect).....	Orchid.....	Colombia (3), Guatemala (1).
Coccus hesperidum (soft brown scale).....	Bay.....	Belgium (2), Holland (1).
Diaspis boisduvalii (scale insect).....	Orchid.....	Colombia (1).
Gracilaria zachrysa (leaf miner).....	Azalea.....	Belgium (10), Holland (2).
Hemichionaspis aspidistra (aspidistra scale).....	Aspidistra.....	Belgium (7), Holland (2), Japan (1).
Lepidosaphes ulmi (oyster-shell scale).....	Boxwood.....	Holland (12).
Parallelodiplosis cattleyæ (Cattleya midge).....	Orchid.....	Guatemala (1).
Phytomyza aquifolii (Dipterous leaf miner).....	Holly.....	Holland (2).
Pseudococcus sp. (mealy bug).....	Bay.....	Belgium (1), Holland (1).
Do.....	Orchid.....	Guatemala (1).
Do.....	Palm.....	England (1), France (1), Hol- land (2), Scotland (1).
Tenthorcoris bicolor (Miridae).....	Orchid.....	Colombia (1).
Diseases:		
Exobasidium sp.....	Azalea.....	Belgium (10).
Sclerotinia fructigena.....	Peach trees.....	England (1).
<b>NEW YORK CITY (FEDERAL INSPECTION).</b>		
Insects:		
Asterolecanium aureum (scale insect).....	Orchid.....	Canal Zone (1).
Bactrodes biannulatus (Reduviidae).....	do.....	Venezuela (1).
Blattella sp. (roach).....	do.....	Colombia (1).
Cerataphis lataniae (palm aphid).....	do.....	Brazil (1).
Do.....	Palm.....	British Guiana (1).
Chrysomphalus dictyospermi (scale insect).....	Cocoonut palm.....	Bahama Islands (1).
Do.....	Palm.....	British Guiana (1).
Chrysomphalus ficus (Florida red scale).....	Cocoonut palm.....	Bahama Islands (1).
Chrysomphalus perseæ (scale insect).....	Orchid.....	Canal Zone (2), Panama (1).
Chrysomphalus personatus (masked scale).....	do.....	Colombia (1).
Conchaspis angræci (scale insect).....	do.....	Canal Zone (1).
Cyphomyrmex salvini Forel, new var. (ant).....	do.....	Colombia (1).
Diaspis boisduvalii (scale insect).....	do.....	Colombia (5), Costa Rica (1), Jamaica (1), Panama (1), Venezuela (4).
Diaspis boisduvalii (scale insect).....	Palm.....	Cuba (1).
Eurycipidia splendens (Miridae).....	Orchid.....	Colombia (3).
Gryllid subfamily Mogisoplistinae, genus of.....	do.....	Colombia (1).
Hemichionaspis minor (scale insect).....	Hibiscus cuttings.....	Costa Rica (1).
Homœogamia brasiliana (roach).....	Orchid.....	Brazil (1).
Iridomyrmex iniquus Mayr., var. nigellus Emery (ant).....	do.....	Colombia (1).
Lepidosaphes sp. (scale insect).....	Agave.....	Panama (1).
Do.....	Croton.....	Cuba (1).
Mecistorhinus melanoleucus (Pentatomidae).....	Orchid.....	Colombia (1).
Megalomyrmex n. sp. (ant).....	do.....	Brazil (1).
Monomorium carbonarium F. Smith subsp. ebeninum (ant).....	do.....	Canal Zone (1).
Parlatoria proteus (scale insect).....	Palm leaves.....	Brazil (1).
Periplaneta sp. (roach).....	Orchid.....	Brazil (2), Colombia (2).

## List, by States, of pests collected—Continued.

State in which collected and name of pest.	Host.	Country of origin.
<b>NEW YORK CITY (FEDERAL INSPECTION)—contd.</b>		
<b>Insects—Continued.</b>		
<i>Pheidole megacephala</i> (ant).....	Pineapple plants.....	Cuba (1).
<i>Pleuriola</i> sp. (Emesidae).....	Orchid.....	Colombia (1).
<i>Prenolepis longicornis</i> (ant).....	Cacti.....	Italy (1).
Do.....	Grasses.....	Do.
Do.....	Orchid.....	Brazil (1), Colombia (3).
Do.....	Palm.....	Italy (1).
<i>Prenolepis</i> sp. (ant).....	Orchid.....	Colombia (1).
<i>Pseudococcus adonidum</i> (long-tailed mealy bug).....	do.....	Brazil (1).
<i>Pseudococcus bromeliae</i> (pineapple mealy bug).....	Pineapple.....	Cuba (1).
<i>Pseudococcus</i> sp. (mealy bug).....	Orchid.....	Colombia (1).
<i>Pseudoparlatoria parlatorioides</i> (scale insect).....	do.....	Brazil (1).
Pyralidae, subfamily Phycitinae.....	do.....	Colombia (1).
<i>Silvanus signatus</i> (Cucujidae).....	do.....	Do.
<i>Tenthecoris bicolor</i> (Miridae).....	do.....	Colombia (2).
<i>Vinsonia stellifera</i> (stellate scale).....	do.....	Jamaica (1).
Do.....	?.....	Do.
<i>Wasmannia auropunctata</i> (ant).....	Orchid.....	Colombia (7).
<b>Disease:</b>		
<i>Colletotrichum gloeosporioides</i> .....	do.....	Canal Zone (1).
<b>NORTH CAROLINA.</b>		
<b>Insects:</b>		
<i>Aspidiotus britannicus</i> (scale insect).....	Bay.....	Belgium (1).
<i>Coccus hesperidum</i> (soft brown scale).....	do.....	Do.
<i>Lepidosaphes ulmi</i> (Oyster-shell scale).....	Evergreen seedlings.....	Holland (1).
Tortricid egg mass.....	Azalea.....	Belgium (1).
<b>Disease:</b>		
<i>Bacterium tumefaciens</i> (crown gall).....	do.....	Belgium (1), Holland (1).
<b>OHIO.</b>		
<b>Insects:</b>		
<i>Apatela auricoma</i> (dagger moth) (pupa).....	Birch.....	France (1).
Do.....	Manetti stocks.....	Do.
<i>Aulacaspis rosae</i> (rose scale).....	do.....	Do.
<i>Chrysomphalus dictyospermi</i> (scale insect).....	Palm.....	Belgium (1).
<i>Chrysomphalus ficus</i> (Florida red scale).....	do.....	Belgium (2).
<i>Coccus hesperidum</i> (soft brown scale).....	Bay.....	Holland (1).
<i>Lepidosaphes ulmi</i> (oyster-shell scale).....	?.....	Do.
<i>Portheia dispar</i> (gipsy moth) (egg cluster).....	?.....	Belgium (1).
<b>Diseases:</b>		
<i>Bacterium tumefaciens</i> (crown gall).....	Manetti stocks.....	France (1).
<i>Botrytis</i> sp.....	<i>Yucca</i> sp.....	France (2).
<i>Exobasidium</i> sp.....	Azalea.....	Belgium (17), Holland (2).
Do.....	Evergreen shrubs.....	Belgium (1).
Do.....	Hortensia.....	Do.
<b>OREGON.</b>		
<b>Insect:</b>		
Elaterid (wireworm).....	Azalea.....	Holland (2).
<b>PENNSYLVANIA.</b>		
<b>Insects:</b>		
<i>Aleyrodes</i> sp. (white fly).....	Azalea.....	Belgium (5).
Do.....	<i>Hæmanthia</i> .....	England (1).
<i>Aspidiotus britannicus</i> (scale insect).....	Bay.....	Belgium (1).
<i>Aspidiotus destructor</i> (scale insect).....	Coconut palm.....	Colombia (1).
<i>Chrysomphalus ficus</i> (Florida red scale).....	Aspidistra.....	Belgium (2).
<i>Coccus hesperidum</i> (soft brown scale).....	Bay.....	Do.
Elaterid (wireworm).....	Rose.....	Holland (1).
<i>Hemichionaspis aspidistræ</i> (aspidistra scale).....	Aspidistra.....	Belgium (1).
<i>Lepidosaphes ulmi</i> (oyster-shell scale).....	Boxwood.....	Holland (5).

## List, by States, of pests collected—Continued.

State in which collected and name of pest.	Host.	Country of origin.
PENNSYLVANIA—continued.		
Insects—Continued.		
Monarthropalpus buxi (box leaf miner).....	Evergreen shrubs.....	Holland (1).
Notolophus antiqua (European tussock moth) (egg mass).....	Crataegus.....	Do.
Psylla buxi (box psylla) (eggs).....	Boxwood.....	Do.
Thrips.....	Azalea.....	Belgium (1).
Diseases:		
Exobasidium sp.....	do.....	Belgium (38), Holland (3).
Gymnosporangium sp.....	?.....	Holland (1).
Pestalozzia sp.....	Rhododendron.....	Do.
WASHINGTON (STATE).		
Insects:		
Lepidosaphes ulmi (oyster-shell scale).....	Boxwood.....	Holland (1).
Pseudaonidia duplex (scale insect).....	Azalea.....	Japan (1).
Do.....	Camellia.....	Do.
Disease:		
Exobasidium sp.....	Azalea.....	Holland (2).
WEST VIRGINIA.		
Insect:		
Chionaspis salicis (willow scale).....	Lilac.....	Belgium (1).
Disease:		
Exobasidium sp.....	Azalea.....	Do.
WISCONSIN.		
Insects:		
Gracilaria zachrysa (leaf miner).....	Azalea.....	Holland (1).
Notolophus antiqua (European tussock moth) (egg masses).....	do.....	Do.
Disease:		
Pestalozzia sp.....	Rhododendron.....	Holland (2).